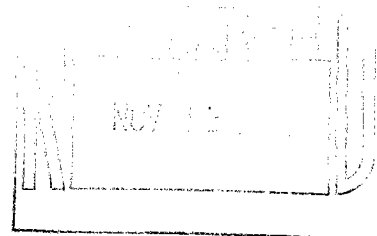


engineering and environmental services

November 10, 1992



Ms. Kelly C. Gage
Guilford County Department of
Emergency Services
P O Box 18807
Greensboro, NC 27419-8807

RE: Harold Hall Property
Soil Sampling and Analysis

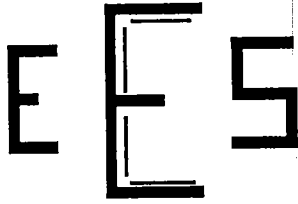
Dear Ms. Gage:

On behalf of Harold Hall, Engineering and Environmental Services (EES) is submitting the results of soil sampling performed at the former gas station located at 108 West Main Street in Jamestown, NC. Soil samples were collected from the base of the used oil excavation and from three soil stockpiles at the site.

Approximately 240 cubic yards of petroleum contaminated soil was stockpiled during Underground Storage Tank (UST) closure activities at the subject site. The soil is stored in three stockpiles behind the services station building (see Site Plan). Composite soil samples were made from six sub-samples collected at locations along each of the stockpiles. The sub-samples were collected from the bottom of the soil stockpiles (approximately two to three feet deep).

Soil samples S-1 and S-2 were collected from stockpiles that contained soil from the diesel and gasoline UST excavations (see Site Plan). Soil samples S-1 and S-2 were analyzed for TPH volatiles and semi-volatiles using EPA Methods 5030 and 3550.

The soil sample S-3 was collected from the stockpile containing soil from the kerosene, used motor oil and diesel UST excavations (see Site Plan). This soil sample was analyzed for TPH volatiles and semi-volatiles using EPA Method 5030 and 3550, residual Oil and Grease using EPA Method 9071 and TCLP Metals.



Page 2
Ms. Kelly C. Gage
November 10, 1992

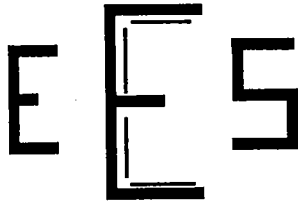
Two soil samples S-4 and S-5 were collected from the used motor oil UST excavation at a depth of 1.0 foot below the floor of the excavation (total depth of approximately 6.0 feet). A background sample, S-6, was collected from the northeast corner of the site. These soil samples were analyzed for residual Oil and Grease using EPA method 9071.

All soil samples were collected using decontaminated hand augers. The hand auger and soil sampling equipment were decontaminated by washing with potable water and phosphate free detergent followed by a potable water rinse, a methanol alcohol rinse and a final rinse with deionized water. Clean latex gloves were worn during sample collection and while compositing the sub-samples. The soil samples were placed into laboratory cleaned glass containers with teflon lined lids and chilled for transport to Blue Ridge Labs, Inc. in Lenoir, North Carolina.

The results of the laboratory analysis are listed in the following table:

SAMPLE LOCATION	DEPTH (Feet)	TPH VOLATILES EPA-5030 (ppm)	TPH SEMI-VOLATILES EPA-3550 (ppm)	OIL & GREASE EPA-9071 (ppm)
S-1	COMPOSITE	71.8	37.0	NA
S-2	COMPOSITE	7.5	122	NA
S-3	COMPOSITE	9.7	11.1	339
S-4	6.0	NA	NA	84
S-5	6.0	NA	NA	182
S-6	≈2.0	NA	NA	258

Note: NA = Not Analyzed for this parameter.



engineering and environmental services

Page 3
Ms. Kelly C. Gage
November 10, 1992

Laboratory analysis of soil sample S-3 for TCLP Metals detected Cd (0.006 mg/l) and Pd (.04mg/l) at concentrations below EPA regulatory levels. The concentration of residual Oil and Grease detected in the soil samples collected from the used motor oil UST excavation were below the background concentrations.

A site has been selected for landfarming the soil stockpiles at the site. A landfarm application permit (Non-Discharge Permit Application) for disposal of the petroleum contaminated soil will be submitted to the Guilford County Department of Emergency Services. Presently a workplan is being prepared to assess the extent of contamination identified during the UST closure activities.

If you have any questions regarding this project, please contact Keith C. Seramur or Ronald T. Bannister at (704) 328-2991.

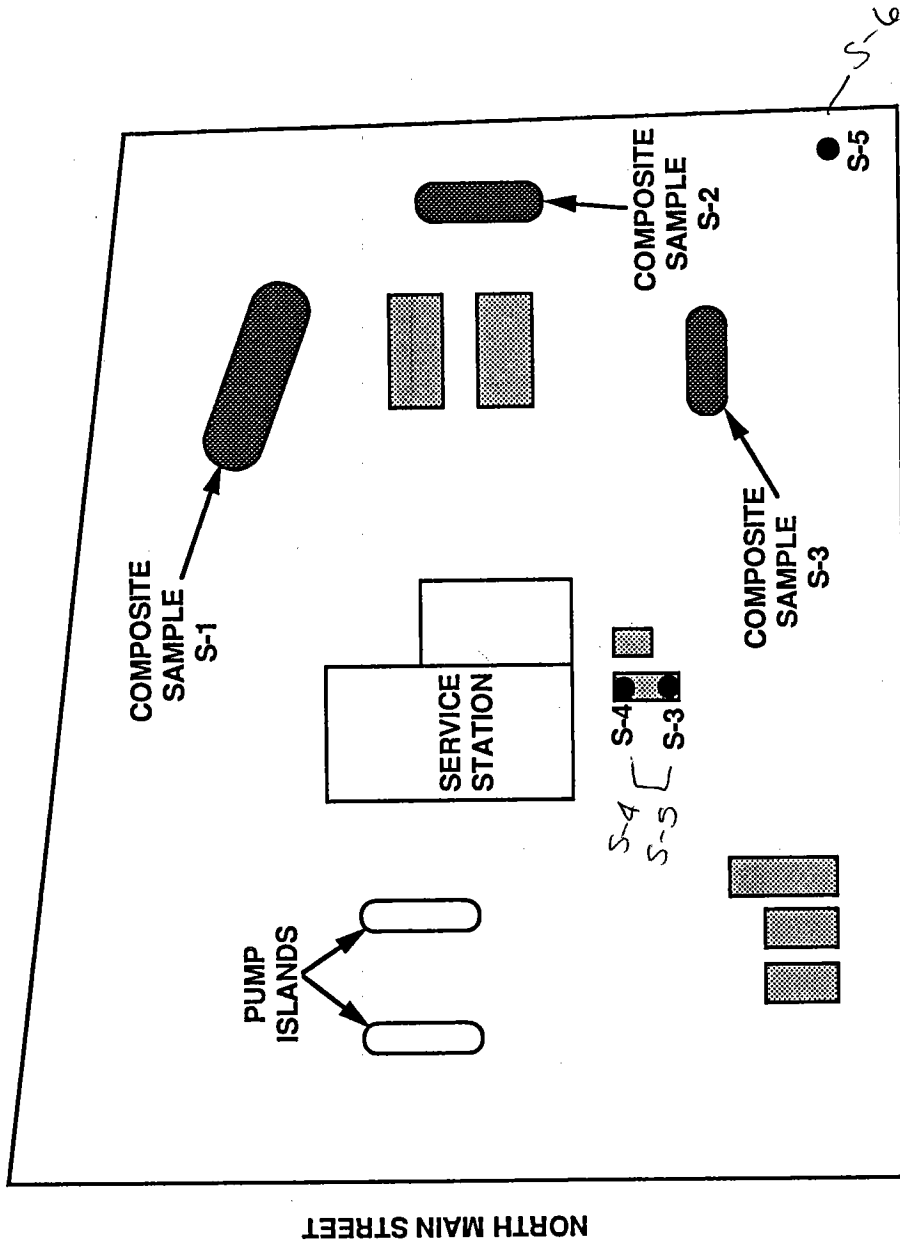
Sincerely,

Keith C. Seramur, P.G.
Engineering and Environmental Services

KCS:jsb

Enclosures

pc: Mr. and Mrs. Harold Hall



ENGINEERING AND ENVIRONMENTAL SERVICES

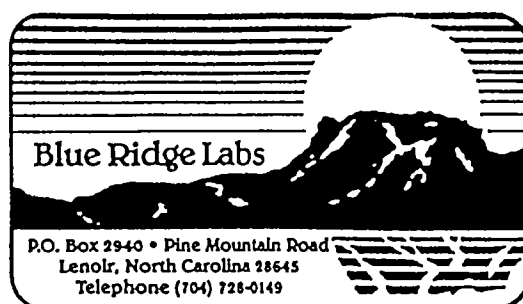
PO BOX 3009 HICKORY, NC 28603 (704)3282991

HAROLD HALL PROPERTY
JAMESTOWN, NORTH CAROLINA

SITE PLAN

DATE	SCALE	APPROVAL
11/4/92	1"=50'	RTB

REV 0
DRAWING NO. 92-095-0001



CLIENT: Engineering and Environmental Services
P.O. Box 3009
Hickory, N.C. 28603

Attention: Mr. R. Bannister

DATE RECEIVED: October 21, 1992

DATE REPORTED: November 2, 1992

SAMPLE NUMBER

SAMPLE DESCRIPTION

210-1850A	Soil; 92095-102092-S1 for 5030 & 3550.
210-1850B	Soil; 92095-102092-S2 for 5030 & 3550.
210-1850C	Soil; 92095-102092-S3 for 5030, 3550, 9071, & TCLP Metals.
210-1850D	Soil; 92095-102092-S4 for 9071.
210-1850E	Soil; 92095-102092-S5 for 9071.
210-1850F	Soil; 92095-102092-S6 for 9071.

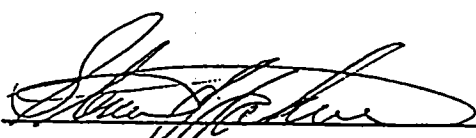
<u>PARAMETER</u>	<u>RESULTS</u>	<u>MDL</u>	<u>DATE STARTED</u>
210-1850A - 5030	71.8	1.0 mg/kg	10/23/92
- 3550	37.0	1.0 mg/kg	10/23/92
210-1850B - 5030	7.5	1.0 mg/kg	10/23/92
- 3550	122	1.0 mg/kg	10/23/92
210-1850C - 5030	9.7	1.0 mg/kg	10/23/92
- 3550	11.1	1.0 mg/kg	10/23/92
- 9071	339	3.0 mg/kg	10/22/92

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275.

<u>PARAMETER</u>	<u>RESULTS</u>	<u>MDL</u>	<u>DATE STARTED</u>
210-1850C - TCLP Metals			
- As	*	0.001 mg/l	10/22/92
- Ba	*	0.10 mg/l	10/22/92
- Cd	0.006	0.001 mg/l	10/22/92
- Cr	*	0.01 mg/l	10/22/92
- Hg	*	0.001 mg/l	11/2/92
- Pb	0.04	0.01 mg/l	10/22/92
- Se	*	0.001 mg/l	10/22/92
- Ag	*	0.01 mg/l	10/22/92
210-1850D - 9071	84	3.0 mg/kg	10/22/92
210-1850E - 9071	182	3.0 mg/kg	10/22/92
210-1850F - 9071	258	3.0 mg/kg	10/22/92

REPORTED BY:


D. R. Wessinger - General Manager

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275.

ENGINEERING AND ENVIRONMENTAL SERVICES

P O BOX 3009
(704) 328-2991HICKORY, NC 28603
FAX (704) 322-2268

CHAIN OF CUSTODY

PO# 921163DATE 10-21-92

LAB RECEIVING

BLUE RIDGE LABSSAMPLE # 92095-102092-S1DESCRIPTION Soil2-4oz JarsLOCATION S-1DATE 10-20-92 TIME 12:23PROCESS 3550 5030PRESERVATIVE chill to 4°CSAMPLED BY KCSSAMPLE # 92095-102092-S4DESCRIPTION Soil1-4oz JarLOCATION S-4DATE 10-20-92 TIME 1:19PROCESS 9071PRESERVATIVE chill to 4°CSAMPLED BY KCSSAMPLE # 92095-102092-S2DESCRIPTION Soil2-4oz JarsLOCATION S-2DATE 10-20-92 TIME 12:42PROCESS 3550 5030PRESERVATIVE chill to 4°CSAMPLED BY KCSSAMPLE # 92095-102092-S5DESCRIPTION Soil1-4oz JarLOCATION S-5DATE 10-20-92 TIME 1:26PROCESS 9071PRESERVATIVE chill to 4°CSAMPLED BY KCSSAMPLE # 92095-102092-S3DESCRIPTION Soil3-4oz JarsLOCATION S-3DATE 10-20-92 TIME 1:05PROCESS 3550 5030 TCLPP MetalsPRESERVATIVE chill to 4°CSAMPLED BY KCSSAMPLE # 92095-102092-S6DESCRIPTION Soil1-4oz JarLOCATION S-6DATE 10-20-92 TIME 1:35PROCESS 9071PRESERVATIVE chill to 4°CSAMPLED BY KCSSRCA METALS

RELINQUISHED BY

KCS

TIME/DATE

5:01 / 10-21-92

RELINQUISHED TO

David H. Hargrett